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| APPLICATION NO. | FIL | ING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--------------------------|--------|---------------|----------------------|---------------------|------------------|
| 10/740,464 12/22/2003 | | /22/2003 | Jang Jin Yoo | 0465-1061P | 3624 |
| 2292 | 7590 | 10/05/2005 | | EXAMINER | |
| BIRCH STE | WART K | COLASCH & BIR | TON, ANABEL | | |
| PO BOX 747 FALLS CHUI | RCH VA | 22040-0747 | ART UNIT | PAPER NUMBER | |
| TALLES CITO | | 22010 0711 | | 2875 | |

DATE MAILED: 10/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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| | Application No. | Applicant(s) | | | | |
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| | 10/740,464 | YOO ET AL. | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | Anabel M. Ton | 2875 | | | | |
| The MAILING DATE of this communication app Period for Reply | ears on the cover sheet with the c | orrespondence address | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA: Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period was period to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 16(a). In no event, however, may a reply be time will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE! | . the mailing date of this communication. (35 U.S.C. § 133). | | | | |
| Status | | | | | | |
| 1) ⊠ Responsive to communication(s) filed on 22 December 2a) ☐ This action is FINAL. 2b) ⊠ This 3) ☐ Since this application is in condition for alloware closed in accordance with the practice under Expression 22 December 24 December 25 December 25 December 26 Dec | action is non-final. nce except for formal matters, pro | • | | | | |
| Disposition of Claims | | • | | | | |
| 4) Claim(s) 1-38 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) 1-25 and 29-36 is/are allowed. 6) Claim(s) 26-28 and 37 is/are rejected. 7) Claim(s) 38 is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. | | | | | | |
| Application Papers | | | | | | |
| 9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) access Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Examine 10. | epted or b) objected to by the Edrawing(s) be held in abeyance. See ion is required if the drawing(s) is obj | ected to. See 37 CFR 1.121(d). | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 12/034 | 4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other: | | | | | |

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DETAILED ACTION

Specification

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 26-28 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mangerson (6,559,827).

Mangerson discloses a plurality of light sources, a diffusion plate arranged above the light sources, an optical shutter device divided into n number of regions and driven in synchronization with the light sources (figs 8 and 9, cols. 7-8 lines 56-67 and 1-15

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respectively); a liquid crystal display panel above the backlight unit (114). Magerson does not specifically recite the light sources arranged on a substrate. It would have been obvious to one of ordinary skill in the art at the time the invention was made to arrange the light sources of Mangerson on a substrate since a substrate such as PCB would provide a electrical connecting means and controlling means for the light sources. With regards the light sources being LED lamps, the examiner takes Official Notice that the use of LEDs is old and well known in the illumination art. It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute an LED for the light source in the system of Mangerson. One would have been motivated since LEDs are recognized in the illumination art to have many desirable advantages, including reduced size, high efficiency, low power consumption, long life, resistance to vibrations, and low heat production, over other light sources.

Allowable Subject Matter

- 5. Claims 1-25,29-36 allowed.
- 6. Claim 38 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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7. The following is a statement of reasons for the indication of allowable subject matter: The prior art cited of record does not teach the following structural combination: a main light guide plate defined into an n number of regions, a plurality of auxiliary light guide plates arranged below edge portions of the main light guide plate, first and second reflection plates arranged below the main light guide plate and the auxiliary light guide plate; a plurality of light source parts arranged at a predetermined interval at both sides of the first to nth light guide plates;

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anabel M. Ton whose telephone number is (571) 272-2382. The examiner can normally be reached on 08:00-16:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Anabel M Ton Examiner Art Unit 2875

Sandra O'Shea
Supervisory Patent Examiner
Technology Center 2800

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